

XP-002254179

**BEST AVAILABLE COPY**

AN - 1991-321508 [44]  
AP - JP19900011047 19900119  
CPY - KOMA-I  
DC - E13 L02 S03  
DR - 0411-U  
FS - CPI;EPI  
IC - B01J13/02 ; C04B14/02 ; C04B20/00 ; G01N33/38  
MC - E10-A01 L02-D13  
- S03-E14D1  
M3 - [01] D013 D016 D111 G013 G019 G100 H4 H402 H442 H8 J5 J521 L9 L942 M1  
M113 M119 M150 M280 M320 M412 M511 M520 M532 M540 M781 M903 M904 M910  
P832 Q453 Q505 R023; R00411-U  
PA - (KOMA-I) KOMATSU Y  
PN - JP3215334 A 19910920 DW199144 000pp  
PR - JP19900011047 19900119  
XA - C1991-138874  
XIC - B01J-013/02 ; C04B-014/02 ; C04B-020/00 ; G01N-033/38  
XP - N1991-246406  
AB - J03215334 Aggregates are added to fresh concrete so that it may be  
destroyed together with the concrete at the site of the breakage or  
crack when concrete is hardened.  
- The aggregate comprises a dye soln. or a reagent soln. capable of  
reacting with concrete components or with air so that they may react  
upon breakage or cracking.  
- The aggregate pref. contains reagent soln. such as 1% phenolphthalein  
ethanol soln. encapsulated in a thin film of, most pref., water glass,  
and further covered with a thin crust of cement.  
- USE/ADVANTAGE - Facilitates visual inspection of cracks or breakages  
or concrete. (3pp Dwg.No.0/0)  
CN - R00411-U  
IW - AGGREGATE FINDER CRACK CONCRETE CONTAIN DYE REAGENT SOLUTION REACT  
CONCRETE COMPONENT AIR BREAK CRACK CONCRETE  
IKW - AGGREGATE FINDER CRACK CONCRETE CONTAIN DYE REAGENT SOLUTION REACT  
CONCRETE COMPONENT AIR BREAK CRACK CONCRETE  
NC - 001  
OPD - 1990-01-19  
ORD - 1991-09-20  
PAW - (KOMA-I) KOMATSU Y  
TI - Aggregates for finding cracks in concrete - contains dye or reagent  
soln. which reacts with concrete components or air upon breakage or  
cracking of concrete